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applying voltage to the solid catalyst to change the solid catalyst; and
heating the interior of the chamber to grow carbon fiber coils from the
stock gas, wherein an exterior of the reaction chamber is substantially free of a magnetic
field during the heating.

1 24. (Amended) The method according to claim 19, wherein the
2 voltage is a DC voltage and the solid catalyst is negatively charged.

E2 1 25. (Amended) The method according to claim 19, wherein the
2 interior of the chamber is heated to a temperature in the range of 700 to 830 degrees
3 Centigrade.

1 26. (Amended) An apparatus for manufacturing carbon fiber
2 coils from a stock gas, which is subjected to thermal decomposition to generate solid
3 carbon, and a catalytic gas, which promotes thermal decomposition of the stock gas, the
4 apparatus comprising:

E3 5 a reaction chamber, to which the stock gas and the catalytic gas are
6 supplied through a port;

7 a solid catalyst located within the reaction chamber;

8 a power source, which is external to the reaction chamber, for applying
9 voltage to the solid catalyst; and

10 a heating device for heating the interior of the reaction chamber to grow
11 carbon fiber coils from the stock gas, wherein the heating device produces substantially
12 no magnetic field in the reaction chamber.

E4 1 36. (Amended) The apparatus according to claim 26, wherein the
2 power source is a DC power source for negatively charging the solid catalyst.
